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(71) Applicant(s)
Boma Technology Co Ltd
(Incorporated in Taiwan)
8th Fl., No 368 Sec 5, Nanking E Road, Taipei, Taiwan

(72) Inventor(s)
Shun-Yi Lee

(74) Agent and/or Address for Service
Kilburn & Strode
20 Red Lion Street, LONDON, WC1R 4PJ,
United Kingdom

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(56) Documents Cited
GB 2305907 A WO 98/26986 A WO 98/10934 A
WO 97/46454 A

(58) Field of Search
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ONLINE: EPODOC JAPIO WPI

(54) Abstract Title
Compact disc labelling device

(57) A CD labelling device comprises a body formed from base 10 and detachable cover 50, an upright post 20 removably secured to the body, and a cap 40 telescopically extending out of the base under the bias of spring 30, the post extending through the spring and the cap, and with central apertures in the base, the cover and the cap all being in alignment. In use, a label 90 is placed in a recess (54), Fig 1 (not shown), on the upper surface of cover 50 and a CD 80 on the top face of cap 40 so that when the CD is depressed against the action of spring 30, the label is affixed to the CD with centring assured by the device. A stack of compact discs can be positioned on a stand (26) attached to the post 20, Fig 5 (not shown).

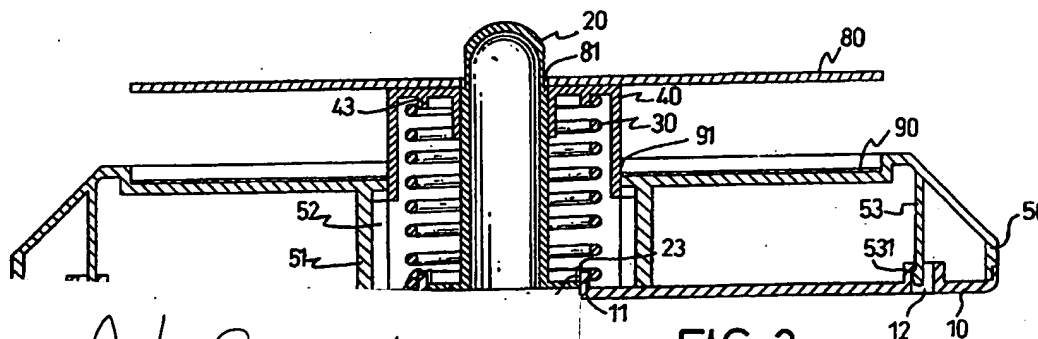


FIG. 3

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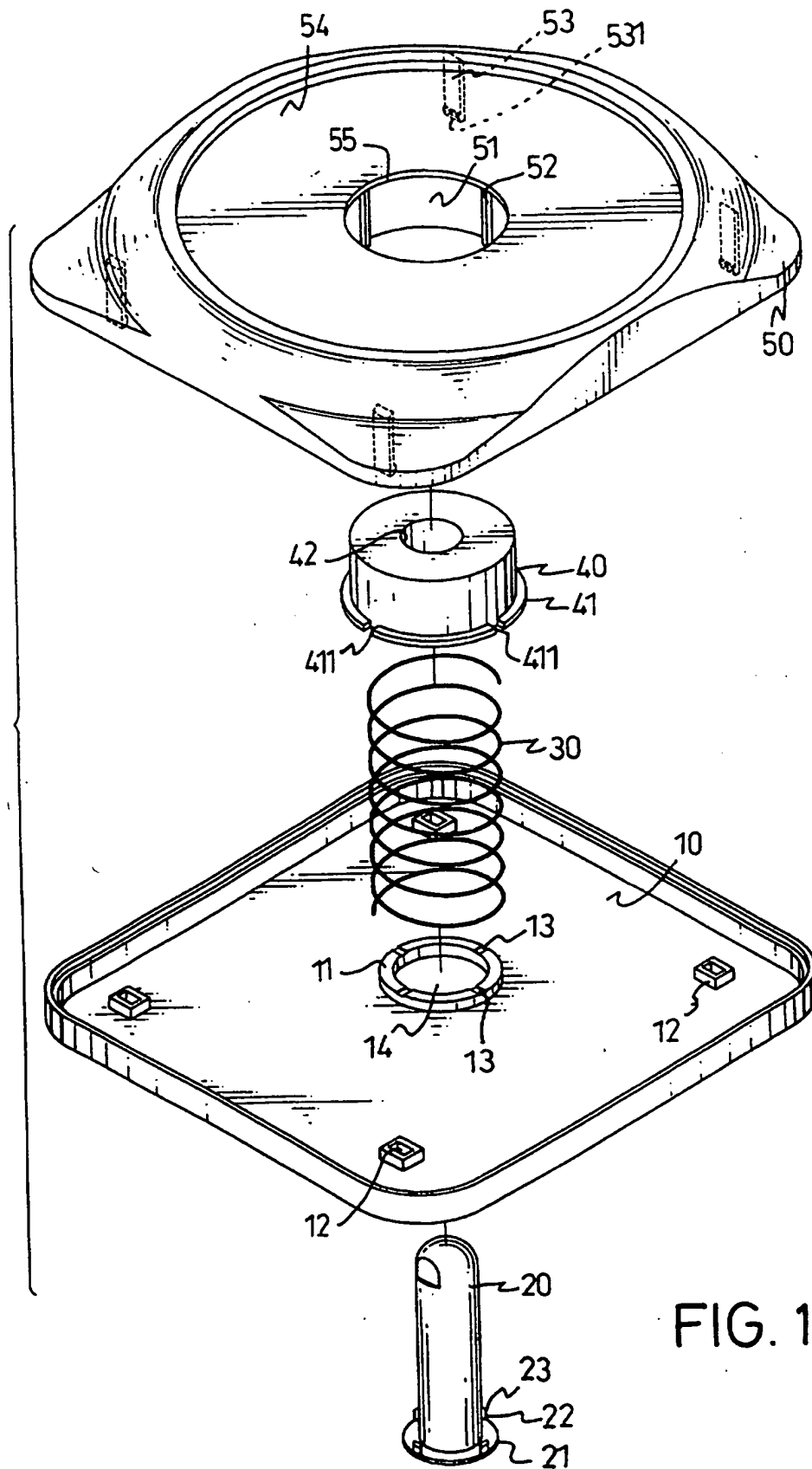


FIG. 1

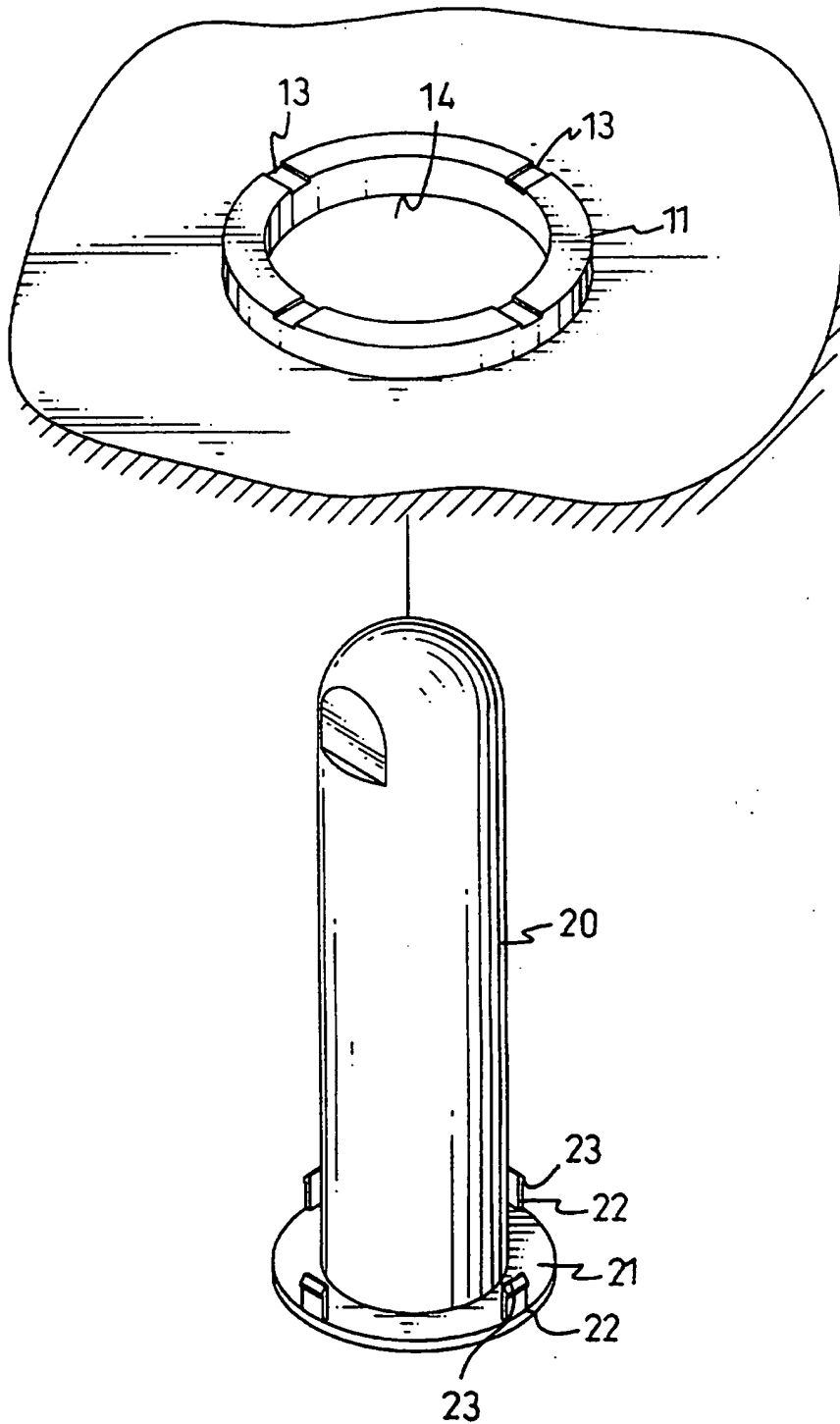
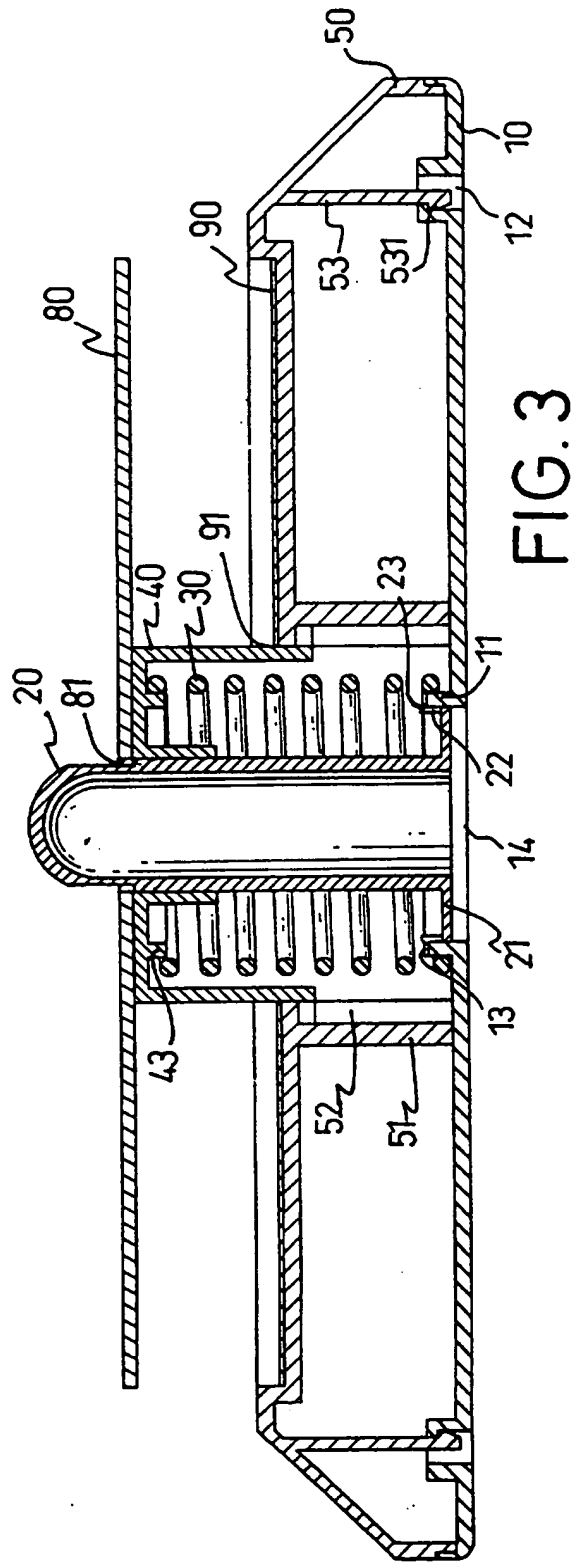
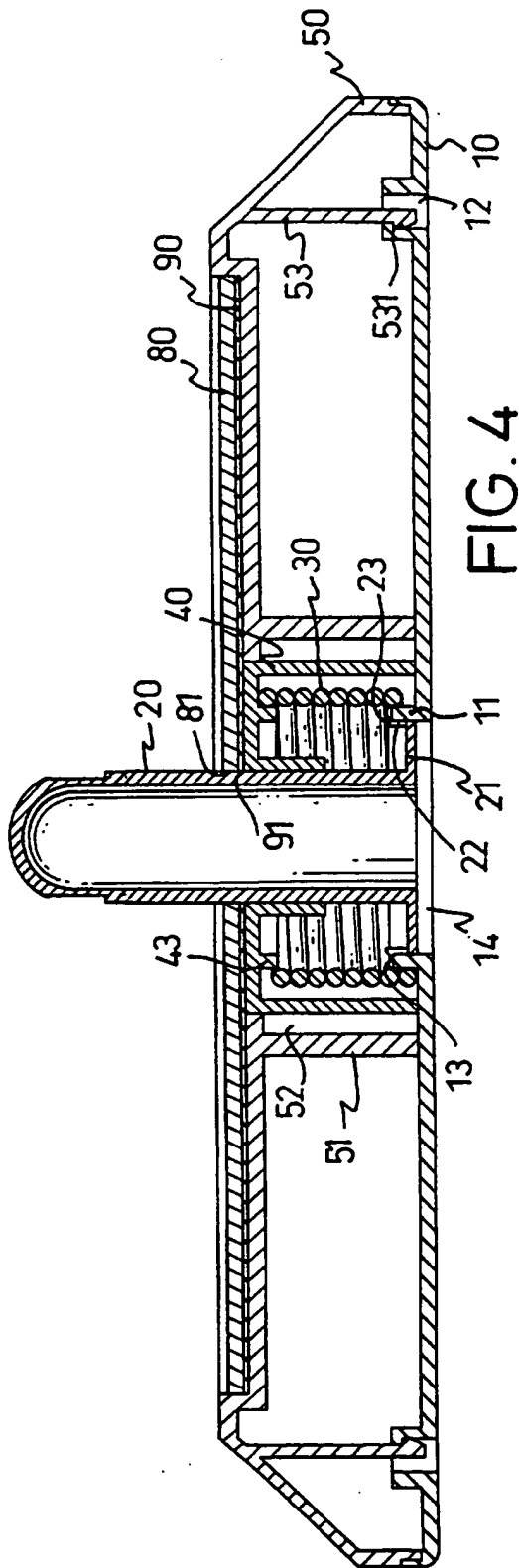


FIG. 2



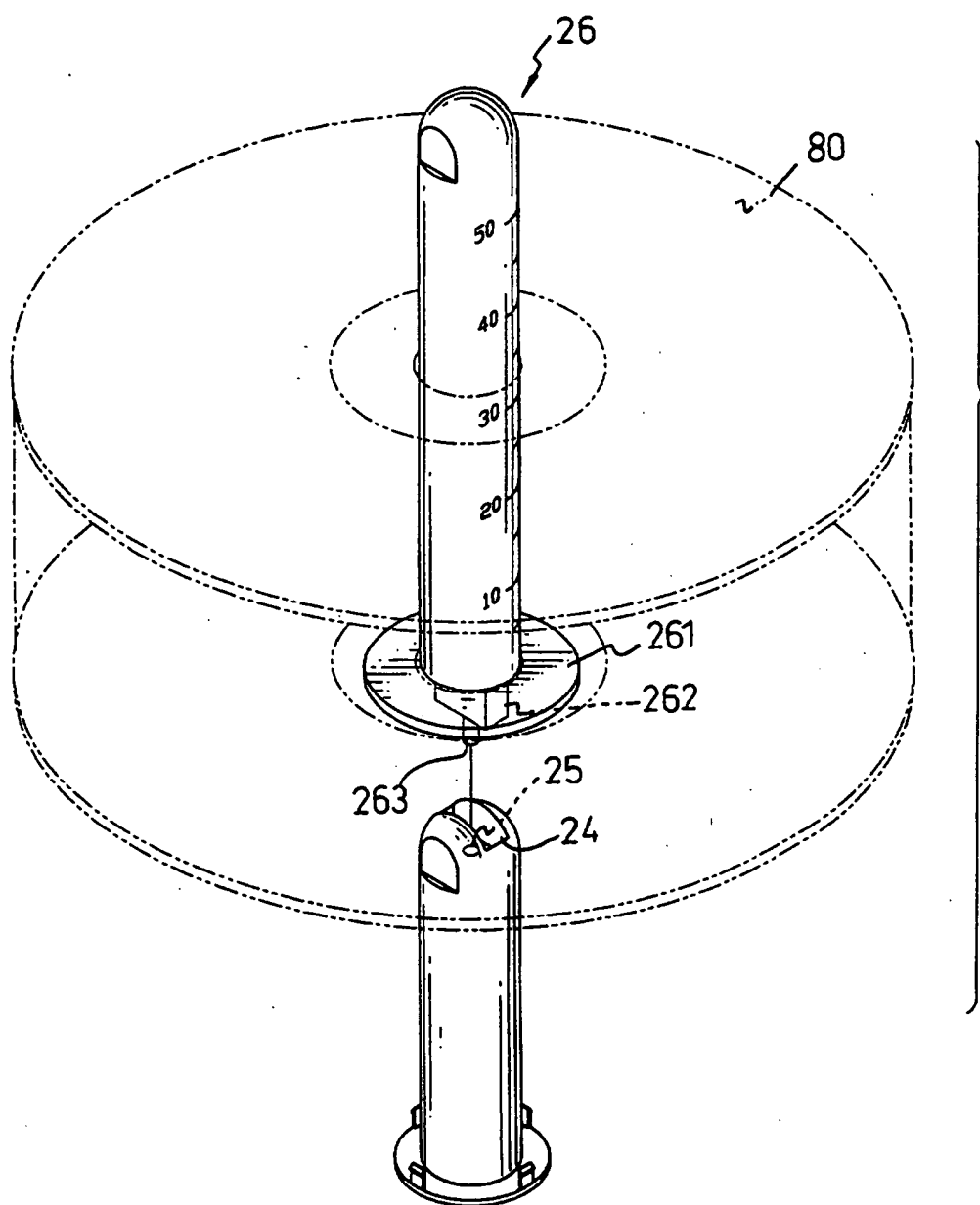


FIG. 5

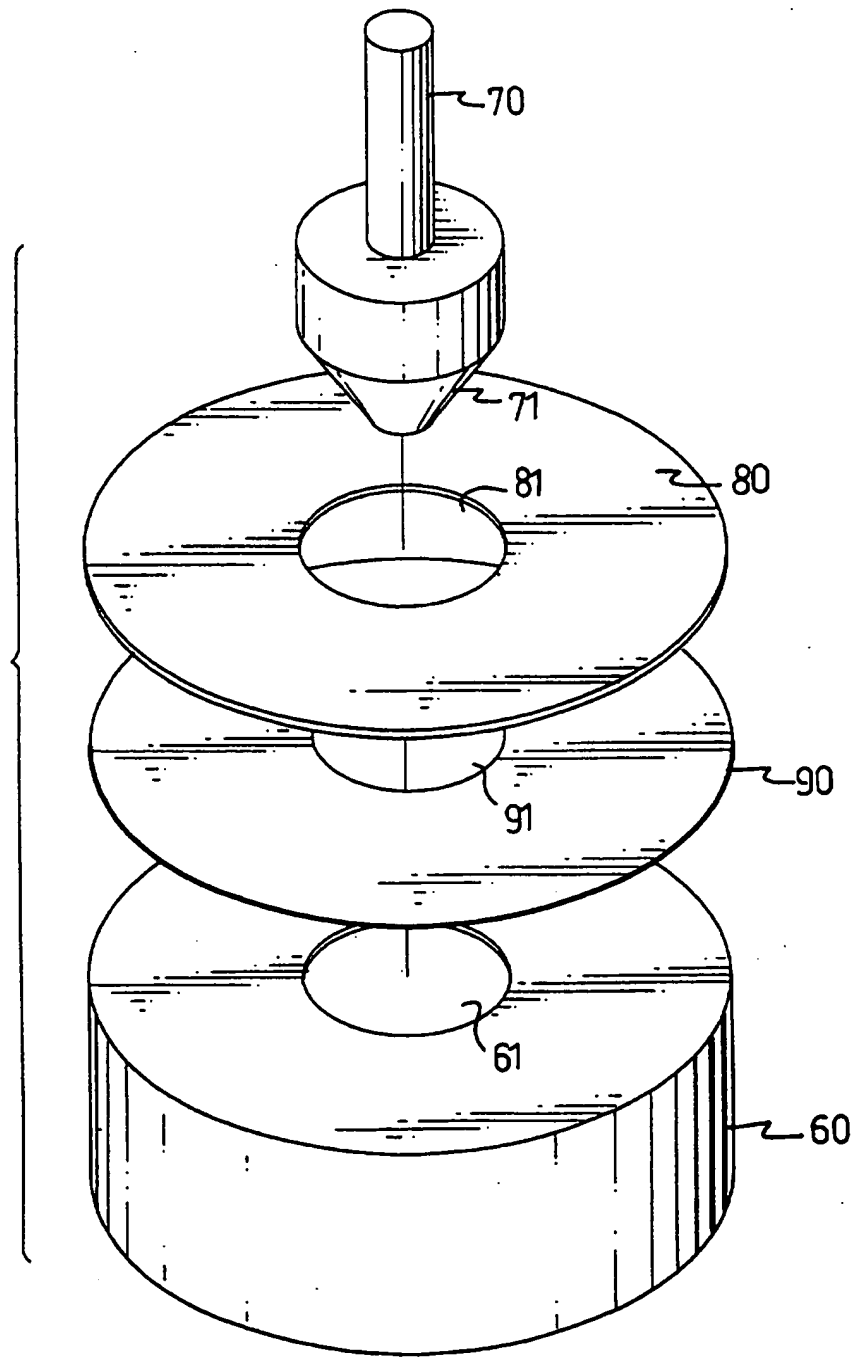


FIG. 6
PRIOR ART

CD LABELING DEVICE

The present invention relates to a CD labeling device and, more particularly, to a CD labeling device that is operated quickly and easily and ensures the label is centered on the CD.

Compact disks (CDs) are typically labeled to identify the content of information recorded thereon. Although the label sheets involved are self-adhesive, they are applied to the disks, in most cases, manually.

As shown in Fig. 6, the conventional CD labeling device includes a circular platform (60) having a central hole (61) defined therein, and a press bar (70) having a handle terminating in an enlarged conical end (71).

In use, a CD (80) to be labeled is held around the conical end (71) of the press bar (70), and a self-adhesive label sheet (90) is centered on the platform (60) with the adhesive surface of the sheet (90) facing upward. The bar (70) is then moved towards the central hole (61) and carries the CD (80) to the platform (60), until the label sheet (90) is engaged with and bonded to the CD (80).

From the foregoing, it is apparent that the conventional device has the problems of being slow and, most likely, applying the label sheet (90) off center on the CD (80). That is to say, the CD (80) must be additionally held at the edge until it reaches the sheet (90), to prevent the CD (80) from falling from the conical end (71) of the pressing bar (70). The operator must also be extremely vigilant in watching both the CD (80) and the label sheet (90) during the labeling process to ensure that the label sheet (90) is centered on the CD (80).

The object of the present invention is to provide a CD labeling device that can be operated quickly and easily.

Another object of the present invention is to provide a CD labeling device that ensures that an adhesive label sheet is centered on the CD.

In the drawings:

Fig. 1 is an exploded perspective view of a CD labeling device in accordance with the present invention;

Fig. 2 is a perspective view of the post and the annular protuberance of the labeling device of Fig. 1;

Fig. 3 is a cross-sectional view a CD labeling device in Fig. 1 with a CD on the device and ready for labeling;

Fig. 4 is a cross-sectional view a CD labeling device in Fig. 1 with the CD having been labeled; and

Fig. 5 is a perspective view of a CD stand for use with the labeling device of Fig. 1.

Referring to Fig. 1, a CD labeling device in accordance with the present invention includes a body (not numbered), a cap (40) telescopically extending out of the body, a spring (30) for biasing the cap (40) and a post (20) removably secured to the body and extending through the spring (30) and the cap (40).

The body includes a base (10) and a cover (50). The base (10) has multiple orifices (12), a central through-hole (14), an annular protuberance (11) around the through-hole (14), and multiple cutouts (13) defined in the face of the protuberance (11). The cover (50) has multiple downwardly extending catches (53) with barbs (531) formed at the distal ends, a circular recess (54) having a flat bottom surface, and an aperture (55) in alignment with the through-hole (14) of the base (10). The aperture (55) is preferably defined by a cylindrical wall (51) formed with multiple inwardly protruding ribs (52).

The cover (50) can be detachably coupled to the base (10) by inserting the catches (53) of the cover (50) into the orifices (12) of the base (10) until the barbs (531) of the catches (53) are snapped onto the edges of the orifices (12).

As mentioned above, the cap (40) telescopically extends out of the body through the aperture (55) in the cover (50). The cap (40) includes a central orifice (42) of the

same diameter as the inner diameter of a CD, a flange (41) formed at the bottom thereof and multiple notches (411) defined in the flange (41).

The notches (411) are configured and arranged to mate with the inwardly protruding ribs (52) of the cover (50), so that the cap (40) is movable but not rotatable with respect to the cylindrical wall (51) of the cover (50), and is normally pressed or biased upward by the spring (30).

Referring to Fig. 2, the post (20) is an elongated cylindrical body having an adequate length to extend through the spring (30) and the central orifice (42) of the cap (40). The post (20) includes a bottom flange (21) with multiple upwardly extending tabs (22), with each tab (22) having a barb (23) at the distal end thereof. The barbs (23) are provided to snap into the cutouts (13) in the annular protuberance (11) at the moment when the post (20) is assembled with the base (10) by inserting the post (20) into the through-hole (14). As a result, the post (20) is removably secured to the base (10) and, hence, to the body.

Referring to Fig. 3, the cap (40) preferably has a skirt (43) that holds the end of the spring (30) therearound, yet the bottom end of the spring (30) is held around the annular protuberance (11) of the base (10). The spring (30) is compressed between the cap (40) and the base (10), and so presses the cap (40) to extend out from the flat bottom face of the shallow recess (54) movably along the cylindrical wall (51), as well as the upright post (20) that further projects from the cap (40).

If a CD (80) is to be labeled, a self-adhesive label sheet (90) is put on the flat bottom face of the shallow recess (54), with the adhesive surface facing upward and the central hole (91) thereof around the periphery of the lifted cap (40), while the CD (80) is placed onto the top face of the lifted cap (40) with central hole (81) thereof around the post (20). The CD (80) to be labeled is then supported by the lifted cap (40) and spaced parallel with the sheet (90), as shown in Fig. 3.

Referring to Fig. 4, once the CD (80) is pressed downward, the telescopic cap (40) is lowered and the CD (80) supported by the cap (40) is engaged with the

adhesive surface of the label sheet (90), which is thus perfectly bonded to the CD (80). The labeled CD (80) is moved upward by the cap (40) by the force of the compressed spring (30) when the cap (40) is released.

Referring to Fig. 5, the device in accordance with the present invention may further include a CD stand (26), preferably configured as a column having a flange (261), a bottom extension (262) extending downward from the flange (261) and a pin (263) projecting from the extension (262). More preferably, the stand (26) is marked with scales from 10 to 50 that indicates the number of CDs (80) supported thereon.

In this case, the post (20) is formed with a top slot (24) corresponding to the extension (262) of the stand (26), with a bore (25) defined therein for the insertion of the pin (263) therein, whereby the stand (26) is attachable to the post (20).

The CD labeling device in accordance with the present invention is advantageous in that it can be operated quickly and easily by placing the label sheet (90) and the disk (80), and by pressing the CD (80) downward. Moreover, the bonded label sheet (80) is automatically centered on the CD (80).

CLAIMS:

1. A CD labeling device comprising:
 - a body having a base and a cover detachably connected with said base;
 - said base having a central through-hole defined therein;
 - said cover having an aperture in alignment with said through-hole of said base and an flat surface to hold a label sheet;
 - a cap telescopically extending out of said body through said aperture of said cover and having defined therein an orifice aligned with said through-hole of said base;
 - a spring compressed between said cap and said base for biasing said cap; and
 - a post removably secured to said base and extending through said body via said through-hole of said base and said orifice of said cap.
2. The CD labeling device as claimed in claim 1 further including a CD stand attachable to said post.
3. The CD labeling device as claimed in claim 2, wherein said post has a slot formed in the top end thereof with a bore defined therein, and wherein said CD stand has a bottom extension complimentary to said slot of said post, and a pin projecting from said extension to be inserted into said bore in said slot.
4. The CD labeling device as claimed in claim 2 and 3, wherein said CD stand is embodied as a column marked with scales from 10 to 50.



Application No: GB 9914607.8
Claims searched: 1 at least

Examiner: Roland Whaite
Date of search: 29 September 1999

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.Q): B8F (F1X)

Int Cl (Ed.6): B65C 9/26

Other: ONLINE: EPODOC JAPIO WPI

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	GB 2305907 A GROSSMAN (see description of page 10)	1
X	WO 98/26986 A MILLER (see especially embodiment of Figs 8 and 9)	1
X	WO 98/10934 A STOMP, INC (see embodiment of Figs 1 to 7)	1
X	WO 97/46454 A CLAUSNITZER (see embodiments of Figs 2/3 and 5/6)	1

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.